

THREE NEW MYRMECOPHILOUS BEETLES.

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The three species of ant-guests described below include a most bizarre ecitophile of uncertain systematic affinities, taken in Mexico in 1913, a species of the genus *Ecitophya* from Brazil and a *Fustiger* from Honduras, the latter the first of its subfamily from the Central American region.

Family STAPHYLINIDAE

Subfamily ALEOCHARINAE

CREMATOXENINI, new tribe.

Near Myrmedoniini. Maxillary palpi, 4-jointed. Labial palpi, 3-jointed. Antennae 11-jointed, inserted in frontal foveae separated by a strong carina. Abdomen oval behind, in front constricted into an elongate, 2-jointed pedicel.

CREMATOXENUS, new genus.

Moderate sized, myrmecoid species, strongly constricted between pronotum and elytra. Head very thick in profile, extended behind into a narrow neck. Eyes well developed, large and rather flat. Maxillary palpi large, 4-jointed; first joint short; second elongate, about half as long as the third, which is elongate, clavate, and circular and nearly plane at tip; fourth joint short and awl-shaped. Maxillary lobes very large, the outer coarsely setigerous apically, the inner with a row of fine hairs on the inner margin. Mentum large, concave at anterior border. Ligula membranous, apparently bilobed. Labial palpi 3-jointed; basal joint short and thick; second and third joints elongate, the second considerably thicker and nearly twice as long as the third. Antennae situated on front of head in large circular foveae which are separated by a strong, median carina; 11-jointed, first joint scapiform, as long as the following three joints together. Clypeus rather flat, nearly straight at anterior border. Mandibles small and arcuate. Pronotum elongate, constricted behind, inflexed nearly vertically at sides; in profile the anterior border is truncate

and forms an angle with the ventral border. Prosternum in front of coxae strongly concave. Mesothorax very small, separated from metathorax by a strong constriction. Scutellum large, elongate, trilobed, the posterior lobe much longer than the others. Metanotum in profile convex in front, then shallowly concave, with a declivous posterior surface separated from the basal part by a rounded angle; from above, large, elongate, with convex sides and truncate posterior border. Elytra apparently fused, suture nearly obsolete, indicated by a faint impression; humeri subgibbous. Metasternum large and convex. Abdomen with a slender, two-jointed petiole, nearly as long as the posterior portion and separated from it by a constriction; posterior portion short and oval, dorsum with a feeble marginal line; segments indistinctly separated. Tarsi 4-5-5 jointed. Legs long and slender. Posterior femora strongly bent basally. Front and middle coxae large, elongate and contiguous; posterior coxae separated.

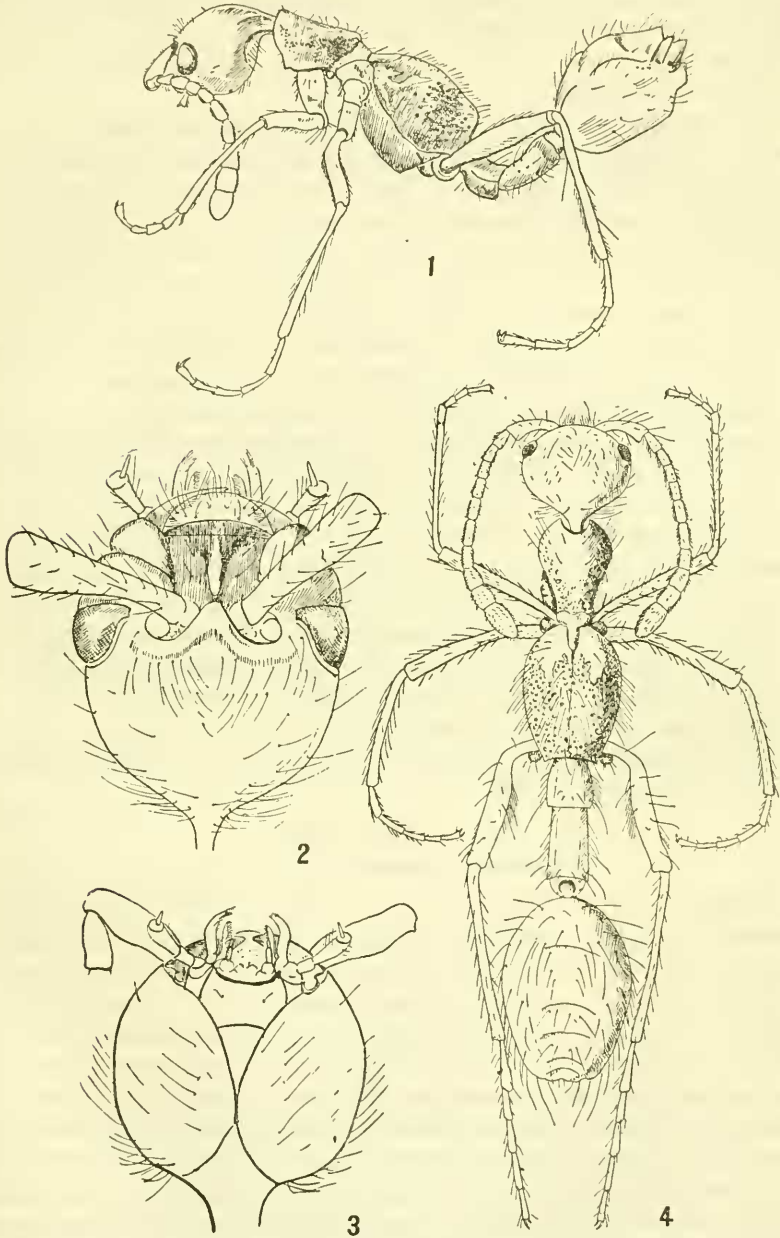
Genotype.—*Crematoxenus aenigma*, new species.

CREMATOXENUS AENIGMA, new species.

Length, 4 mm. Color dark brownish red, shining, the pronotum, metanotum, first segment of the petiole, the antennae, and legs less so than the remainder. Posterior portion of pronotum and the elytra (except the humeri) rather coarsely punctate, remainder of body and the head sparsely and very finely punctate; antennae densely punctate; legs shallowly punctate. Head, body, and legs with abundant fine, yellow hairs, long and erect ones mingled with others shorter and suberect. Antennal funiculus with shorter and stiffer curved hairs. Ventral surface of thorax finely punctate and sparsely pilose.

Head a little longer than broad, sides convex. Clypeus broad, very shallowly concave at anterior border. Labrum broader than long and broadly rounded in front. Antennal scape about as long as the following three joints together; funiculus slightly thickened apically, all joints longer than broad, the first and second subequal and longer and considerably more slender than the third and fourth; joints five to nine each slightly longer than the one preceding; terminal joint shorter than the two preceding joints together. Pronotum much narrower than head, broadest at anterior fourth where it is twice as wide as at base, sides in front strongly convex, behind feebly concave. Elytra together longer than broad and one-third broader than pronotum, convex at sides, truncate behind, the declivous posterior portion less than one-third as long as the basal part. First segment of petiole longer than broad, about half as long and distinctly broader than the second, second joint at base much

smaller than the first, in profile half as thick in front as the first, gradually thickened posteriorly, from above but little broader behind than in front, and with nearly straight sides.



FIGS. 1-4.—*CREMATOXENUS AENIGMA*. 1. HABITUS DRAWING, FROM SIDE, THE PETIOLE HELD AS IN THE SPECIMEN. 2. HEAD, FROM ABOVE. 3. HEAD, FROM BENEATH. 4. DORSAL VIEW, WITH THE ABDOMEN STRAIGHTENED. DRAWN BY A. G. BÖVING.

Type locality.—San Miguel, Hidalgo, Mexico.

Type.—Cat. No. 23936, U.S.N.M.

Host.—*Eciton (Acamatus) melanocephalum*, subspecies *xipe* Wheeler.

The ants, which formed the type series of the subspecies, were taken in the act of raiding a nest of *Pheidole vasleti*, var. *acolhua* Wheeler, and I picked up the beetle without noticing that it was different from the ants.

Unfortunately I took but one specimen of this anomalous species, and, not wanting to risk dissecting out the mouth parts, have ventured to describe it only as seen under the binocular. The mandibles are tightly closed and their structure can not definitely be made out. The segments on the posterior portion of abdomen are very indistinct. The first seems to be as long as the remaining ones together.

The actual systematic position of the species is doubtful. Because of the structure of the mouth parts and the tarsal formula I have placed it near the tribe Myrmedoniini in the Aleocharinae.

In general habitus, the structure of the antennae, the constricted thorax, the curious modification of the metanotum with its basal and declivous portions, the petiolate abdomen, and in pilosity and color *Crematoxenus* is quite the most ant-like beetle that I know of.

After I had failed to distinguish it, both in the field and when mounting up the type series of ants, two preparators at different times mounted ants from the vial and the beetle was noticed only when there remained but three ants, when the twisted appearance of the specimen attracted attention. Since mounting the specimen I have exhibited it to several entomologists as a new ant or as a new Proctotrypid without being contradicted.

The abdomen in the specimen is slightly elevated and probably is carried that way in life.

Tribe MYRMEDONIINI.

ECITOPHYA CONSECTA, new species.

Length, 5 mm. Form elongate, slender; color brown, opaque, densely and finely punctate throughout and with moderately long, suberect hairs on head, body, and appendages. Head three times as long as broad, broadest behind eyes and narrowed toward occipital border; strongly and broadly impressed from immediately back of eyes to half the distance to occipital border. Antennae about half as long as the body, somewhat thickened apically; the first joint about five times as long as the second and about two-thirds as long as the third, fourth joint one-fourth as long as the third, remaining joints each slightly longer than the one preceding; apical and penultimate joints subequal. Prothorax twice as long as broad, the dorsum with a strong entire median groove and large depressions laterally. Elytra together about one and one-third times as long as broad,

sides parallel, except in front of humeri and at apical corners where they are oblique; surface impressed near front border; each elytron with a thick, low and broadly rounded carina which extends obliquely from the humerus to near the middle of posterior border. Abdomen

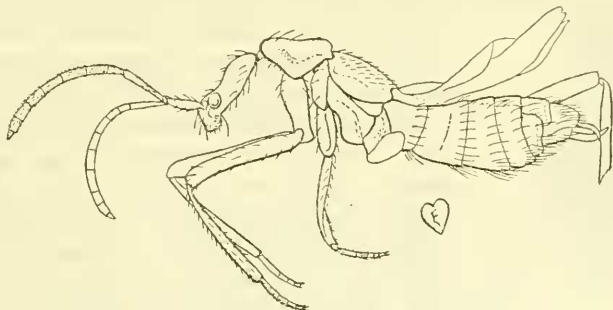


FIG. 5.—*ECITOPHYA CONSECTA*, NEW SPECIES. DRAWN BY E. HART.

about three times as long as broad, broadest at middle; first five segments rather strongly margined. Legs very long and slender.

Type locality.—Abuna, Rio Madeira, Brazil.

Host.—*Eciton vagana* F. Smith.

Type.—Cat. No. 23080, U.S.N.M.

Described from a unique specimen found with the host ant.

The column of ants had spread out to attack me and the beetle taken to flight and was hovering over the ants.

This species resembles *Ecitophya simulans* Wasmann and both belong to Wasmann's "Mimikry typus." Rev. Eric Wasmann has kindly compared *consecta* with the type of *simulans*. The latter species differs in its more robust form, thicker head, in the antennae being much shorter and stouter and with the last two antennal joints shorter.

The type specimen is imperfect, lacking the left posterior leg and part of the right one.

Family PSELAPHIDAE.

Subfamily CLAVIGERINAE.

FUSTIGER CLAVIPILIS, new species.

Female.—Length, 1.4 mm. Color uniformly brownish red. Head twice as long as broad, a little broader in front than behind; sides behind eyes subparallel; coarsely punctate and with fine and short striolae. Antennae coarsely punctate, more sparsely apically, as long as head; terminal joint clavate, plane and circular at tip. Eyes composed of about 15 facets, situated at middle of sides of head. Prothorax nearly as long as head, a little narrower in front

than behind, sides moderately convex; surface moderately convex in front, flat behind; sculpture coarse, similar to head. Mesosternum coarsely and irregularly longitudinally striate. Elytra more than twice as broad as prothorax, broadest behind middle; posterior corners narrowly rounded, border concave; finely punctate, basally with numerous short striae and two long ones extending subparallel to the sutural striae; humeri with oblique margins, which extend backward as very short striae. Abdomen regularly and distinctly, though finely punctate, a little longer than elytra, strongly convex posterior to the pit, which is broad and deep and grooved at bottom; lateral tubercular structures small, elongate, fascicles thin. Propygidium four times as broad as long. Legs short and rather stout.

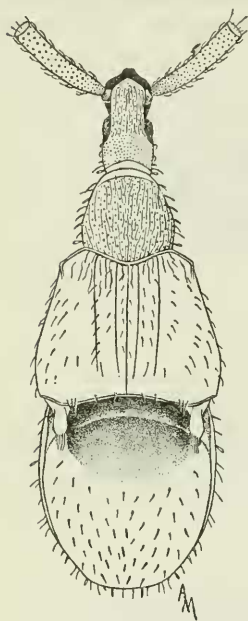


FIG. 6.—PUSTIGER CLAVIPHILIS,
NEW SPECIES. DRAWN BY A.
MOTTER.

Hairs abundant, curved, rather short and stiff. A few clavate hairs mingled with the others on the neck and abdomen.

Type locality.—Lombardia, Honduras.

Host.—*Wasmannia auropunctata* Roger.

Type.—Cat. No. 23937, U.S.N.M.

Described from a single specimen taken in a nest of the host ant. On the posterior border of the elytra the hairs are longer and on either side several are grouped into thin fascicles.